THE CHEVROLET STORY

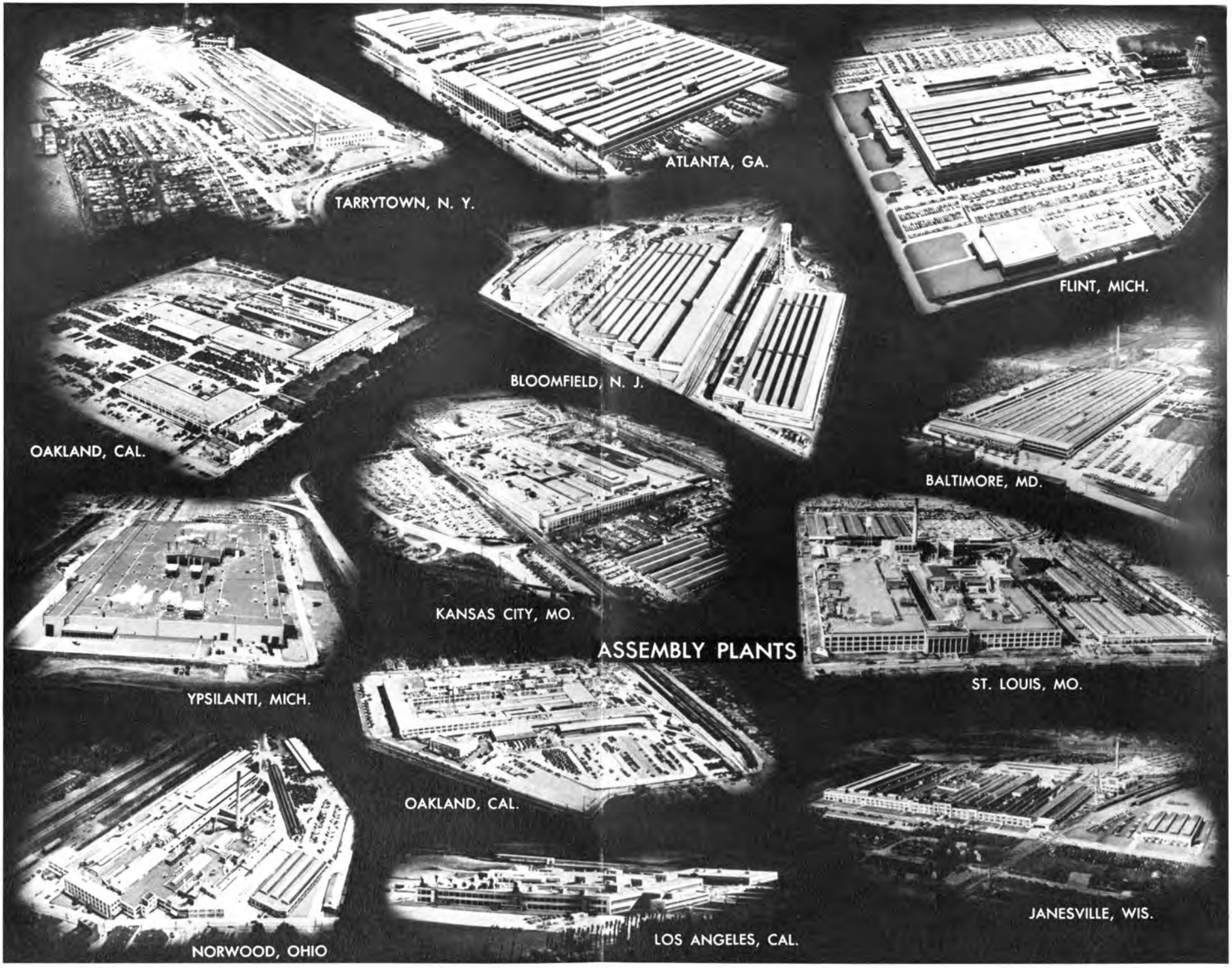
1911-1960

1960 Chevrolet Impala Convertible with Corvair 700 4-Door Sedan in background.

1911

1960

Corvair 700-4-Door Sedan


TARRYTOWN, N. Y.
ATLANTA, GA.
FLINT, MICH.
BLOOMFIELD, N. J.
OAKLAND, CAL.
BALTIMORE, MD.
KANSAS CITY, MO.
ASSEMBLY PLANTS
YPSILANTI, MICH.
ST. LOUIS, MO.
OAKLAND, CAL.
JANESVILLE, WIS.
NORWOOD, OHIO
LOS ANGELES, CAL.

THE CHEVROLET STORY

The ability to foresee the changing patterns of the American way of life . . . this is the key to the dynamic story of Chevrolet success. Herein lies the answer to how Chevrolet became the world's largest builder and seller of passenger cars and trucks.

This is the behind-the-scenes picture of men and machines working and progressing together, the story of men of vision constantly seeking to better the techniques and methods of today to meet the needs of tomorrow.

← *Panorama of Chevrolet assembly plants.*

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CHAPTER ONE

The Pioneering Years—1911-1920

ONE DAY in March 1911, a group of men working in a loft above a small shop on Grand River Avenue in Detroit began assembling the first Chevrolet. This car was the Classic Six, a five-passenger touring car, and two years of experiments and tests preceded the actual assembly work. Louis Chevrolet, the colorful race driver famed in the early years of the century, directed this work, having been hired by W. C. Durant to design an engine for the car.

The first Chevrolet car built in 1912.

Durant was a fabulous man in the automotive world. His financial genius helped to organize General Motors in 1908 and now he was looking for new worlds to conquer in the exciting atmosphere of the automobile industry.

The Chevrolet Motor Company was incorporated on November 3, **1911**, and Durant leased a plant on Detroit's West Grand Boulevard for building his Chevrolet car. Two other companies, the Little Motor Car Company and the Mason Motor Company, started in Flint, Michigan that year and became part of the foundation of Chevrolet. Little produced an economical 4-cylinder runabout and Mason built engines.

Production for **1912**, the first full year of Durant's operations, totaled 2,999 Chevrolets. When Durant merged the

The first Chevrolet valve-in-head engine and Chevrolet trademark were part of this 1913 Baby Grand touring car.

Famous Chevrolet trademark, second from the left, the symbol of dependability, economy and quality in automobiles. Also shown are three early Chevrolet nameplates.

Little Company and Chevrolet in **1913**, he gave the Chevrolet name to the Little car and moved the Detroit plant to his old Flint Wagon Works.

Chevrolet's famous Baby Grand touring car and Royal Mail roadster were first introduced in 1913. Demand for Chevrolet cars reached the point that additional production facilities were needed and a second assembly plant was leased in New York City. Production rose to 5,987 units.

This was also the year that the famous Chevrolet trademark was first used on the cars. This distinctive trademark has appeared billions of times on products, advertising and sales literature as the mark of dependability, economy and quality in motor transportation. It originated in Durant's imagination when, as a world traveler in 1908, he saw the pattern marching off into infinity as a design on wallpaper in a French hotel. He tore off a piece of the wallpaper and kept it to show friends with the thought that it would make a good nameplate for a car.

Later he decided on the name Chevrolet for his car because race drivers were heroes of the day and also because he felt that the name Chevrolet had a musical sound and the romance of foreign origin. The original trademarks for the

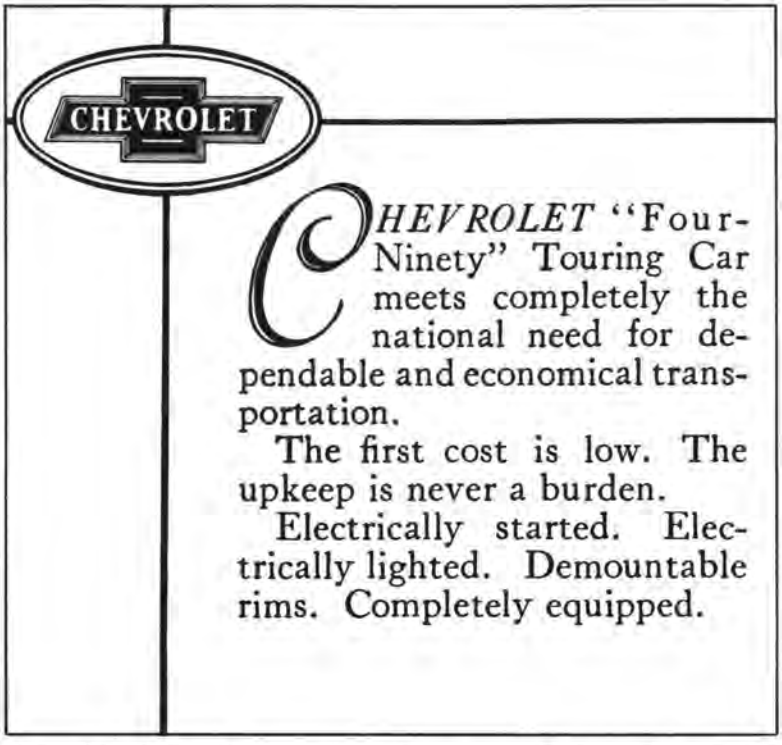
Baby Grand touring car and Royal Mail roadster, also products of Durant's imagination, were designed between August and December 1913.

Another significant landmark was blazed in the 1913 Chevrolet–the introduction of the valve-in-head engine which has become the basic principle of all modern automobile engines today. Here is a description of the 1913 engine taken from advertising of that year:

"Gasoline is introduced directly into the cylinder head and exploded there. The full force of the explosion comes into direct contact with the piston head. For this reason Chevrolet power is maximum with minimum fuel."

In June **1914,** the Maxwell Motor Company's Tarrytown, New York, plant was purchased for assembly operations to meet the growing demand for Chevrolet cars.

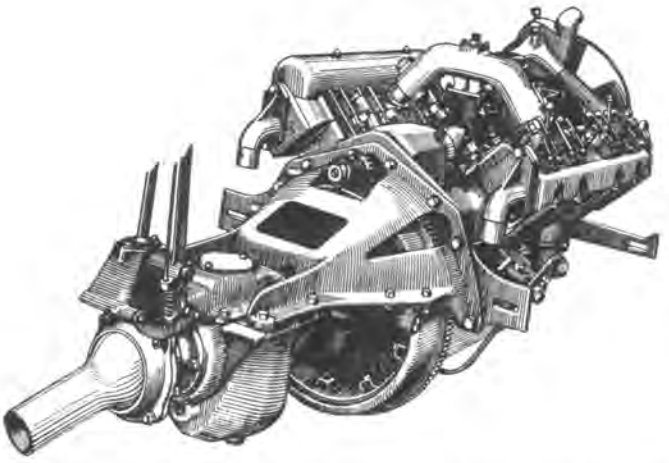
An early Chevrolet assembly line in operation at Flint, Michigan.


CHEVROLET
CHEVROLET "Four-Ninety" Touring Car meets completely the national need for dependable and economical transportation.
The first cost is low. The upkeep is never a burden.
Electrically started. Electrically lighted. Demountable rims. Completely equipped.

This 1916 Chevrolet newspaper advertisement is believed to be the first ad published for Chevrolet.

The need for a wholesale selling organization was met in 1914 with the establishment of an office in Oakland, California. Other offices opened a year later in Kansas City, Missouri and Atlanta, Georgia.

St. Louis, Missouri, and Oshawa, Canada, were the next sites of Chevrolet growth in **1915.** The "490" model was brought out this year and assembly began in the Tarrytown, New York, plant. Also in 1915 Chevrolet made electric lights



A new 90-degree valve-in-head V8 engine was introduced in 1917.

standard equipment. This same year Chevrolet licensed the Gardner Buggy Company in St. Louis to assemble cars.

With the **1916** models, Chevrolet was ready to launch its first important bid for volume production and the mass market. Earlier, Chevrolet was competing in a market just above the low-price class. But when the "490" came out, named because it sold for $490.00, Chevrolet plunged into the toughest competition—leadership in the low-price field.

By now Chevrolet production facilities included plants in Fort Worth, Texas, and Bay City, Michigan. The Warner Gear operation in Toledo, Ohio, was bought and became the Chevrolet-Toledo Manufacturing plant. Chevrolet opened the Oakland, California, assembly plant in 1916, the first in the industry on the West Coast. New plants were also operating

in Flint. Production jumped to 70,000 cars by the end of 1916. Expansion was still the keynote the following year and 125,882 units were manufactured. Chevrolet built its first closed car bodies in 1916. Retail selling stores were opened in many large cities, principally in the eastern part of the country, to bring the car to the people.

A new 90-degree valve-in-head V8 engine was introduced by Chevrolet in **1917.** The Mason Motor Company in Flint merged with Chevrolet in this year to build engines. Also the forerunner of today's modern hardtop, a Chevrolet "490" five-passenger sedan with removable posts that made it an open car for touring, was brought out by the company.

Chevrolet became a part of General Motors in **1918** and embarked upon a new era of greater expansion. A new assembly plant was started in St. Louis and Chevrolet began building light delivery and 1-ton trucks, the latter with hard rubber rear tires. Completing its first full year with General Motors, Chevrolet produced nearly 150,000 units in **1919.** A $500,000 addition to the Oakland assembly plant was completed in **1920.**

1912-13

1914

1915

1916

Chevrolets of the Pioneering Years, 1911-1920

1917

1918

1919

1920

CHAPTER TWO

Growing to Leadership—1921-1930

THE YEARS immediately following World War I almost cost Chevrolet its corporate existence. General Motors' management called in a firm of industrial engineers to survey all properties of the corporation. One of the recommendations coming out of this survey was the liquidation of Chevrolet because it "could not hope to compete in its field."

Alfred P. Sloan, Jr., serving as principal assistant to Pierre S. duPont, president of GM, took the engineers' report as a challenge to prove that Chevrolet could compete successfully in the low-price field. As a result Chevrolet was saved, and moved forward with renewed vigor to scale the heights of automotive sales leadership.

The **1921** Chevrolet incorporated several features which formerly were extra-cost options. These new standard equipment items included demountable rims and the self-starter. Production for the year reached 76,370 units as the economy of the country began to show an encouraging upward trend.

On February 23, **1922**, C. S. Mott, who has been a director of GM since 1913, hired William S. Knudsen, resigned production head of Ford Motor Company, as his

assistant. Mott was then director of the Advisory Staff and Supervising Vice President of the GM Car and Truck Divisions. Knudsen was named the head of Chevrolet Motor

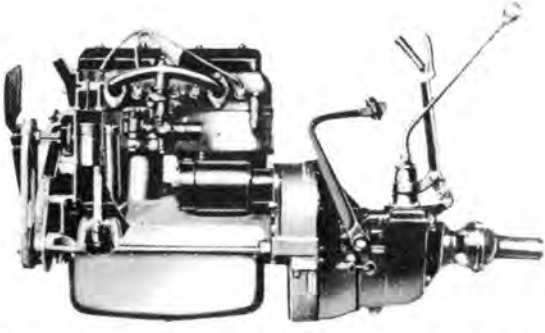
CHEVROLET ANNOUNCES A COMPLETE STANDARD MOTOR CAR FOR $525
In offering the Superior Chevrolet at $525, its manufacturers call attention to certain features of construction, equipment and performance that are positively necessary to complete satisfaction.
Cars less complete, less standard, must now submit to direct comparison with the Superior Chevrolet, and stand or fall on price only.
For there is no lower priced automobile in the world that has the qualities of Chevrolet. Pay a little less and you get much less.
Check these superiorities—these absolute essentials to comfort and economy, and see whether they are not, each and every one of them, indispensable to a real, modern automobile.
Chevrolet Four Passenger Coupe and Four Door Sedan, mounting the latest Fisher Body creations at $875 – f. o. b. Flint
CHEVROLET MOTOR COMPANY
Division of General Motors Corporation
DETROIT, MICH.
AMERICAS MOST ECONOMICAL MOTOR CAR
CHEVROLET

This is a 1923 newspaper advertisement announcing the Chevrolet "Superior," successor to the famous "490."

One-piece windshield with automatic wiper.

The new 11-inch brake.

The banjo-type rear axle.



Cutaway view of the valve-in-head 4-cylinder engine.

A few engineering details of the 1925 Chevrolet. This was the year Chevrolet production exceeded 500,000 units for the first time.

"A Six for the Price of a Four" introduced Chevrolet's famous 6-cylinder engine in 1929.

"Ray and His Little Chevrolet" was one of the many popular Chevrolet songs during the 1920's.

Company in 1922 and five years later Chevrolet became the biggest auto maker in the world.

Knudsen sparked a new vitality in Chevrolet and production jumped to 243,479 in 1922 with the introduction of the "Superior" model–successor to the "490." Plant facilities were expanded in Detroit, Michigan; Janesville, Wisconsin; Buffalo, New York; Norwood, Ohio.

By **1924** Chevrolet had manufacturing plants in four cities, six assembly plants were operating and 16 regional sales offices covered the country.

Chevrolet production expanded to over 500,000 units in **1925,** marking the first time in the company's history that such a peak was attained. The 1925 car was redesigned with such outstanding features as "Vision Ventilation"–the one-piece windshield with automatic wiper on all closed models, single dry plate clutch, banjo-type rear axle, and new 11-inch brakes. The Bloomfield, New Jersey, assembly plant was acquired in 1925.

Mr. Sloan announced in **1926** that $8 million was being

appropriated to increase Chevrolet's production facilities to one million units per year. The battle to challenge sales leadership in the industry was now in full swing.

The Detroit plant of General Motors Truck Corporation was taken over in 1926 to manufacture Chevrolet front and rear axles.

Victory came to Chevrolet in **1927** when the company outsold Ford for the first time in history. The Saginaw Grey Iron Foundry was added in 1927. Chevrolet also achieved the first of its many "million-unit" years in 1927—production was 1,001,880. While Chevrolet's major competitor brought out the Model A with its four-cylinder engine, Chevrolet was laying plans to command the low-price field with "A Six for the Price of a Four."

Preparations for this change were mapped carefully and secretly. The first move was to increase the length of the chassis by four inches which was done in **1928.** This set the stage for the sensational introduction of the valve-in-head six-cylinder engine a year later.

A new assembly plant in Atlanta, Georgia, began operations in 1928 and an assembly plant in Kansas City, Missouri, was begun.

The year **1929** also saw the use of color on car bodies, a far cry from the one-time competitive edict of "any color so long as it's black." The buying public responded to these advances and Chevrolet production reached 1,328,605.

1921

1922

1923

1924

Chevrolets of the Twenties, 1921-1930

1925

1926

1927

1928

1929

1930

CHAPTER THREE

Taking the Leadership—1931-1941

ALTHOUGH the depression years created severe economic hardships throughout the country, Chevrolet was able to make major manufacturing expansions, erecting a new spring plant in Detroit and acquiring a plant in Indianapolis to build commercial and truck bodies on a large scale.

A fresh leadership drive was sparked in **1931** with Chevrolet's "greater value" valve-in-head Six. This production and sales leadership has been maintained consistently over the years, making Chevrolet America's most popular car. Clearly the company had made a roaring comeback since 1921 when its competitive outlook was termed "hopeless."

In 1931, a new bumper plant began manufacturing in Detroit.

Knudsen became executive vice president of General Motors in **1933** and seasoned leadership was moved up to fill his place. M. E. Coyle was made general manager of Chevrolet, having started with GM in 1911 and with Chevrolet in 1917. He had been serving as assistant to Knudsen since 1925.

In 1933 the most famous ot all industrial youth promotions—the All-American Soap Box Derby—was born. The first of these races was held in Dayton, Ohio. The Derby was the brain child of Myron E. Scott, a Dayton newspaperman,

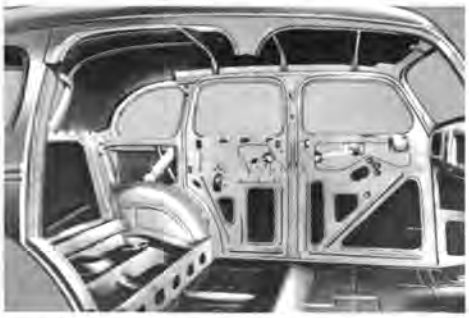
A thrilling finish in the All-American Soap Box Derby.

and now assistant public relations director of Chevrolet.

Scott photographed a local neighborhood race as a feature story for his newspaper and sold Chevrolet on the idea of a nationwide competition with joint sponsorship of local Derby races by Chevrolet dealers and leading newspapers. After running down a brick-paved hill in Dayton, the Derby was moved to Akron, Ohio, in 1935, where all subsequent national races have been held. From its small beginning in 1933, the Soap Box Derby has grown to be the greatest amateur racing event in the world.

The 22nd running of the All-American was held in 1959. Boys from the United States, Canada, West Germany, the Philippines and Venezuela competed for $15,000 in college scholarships and many other valuable awards in the biggest Derby ever held. 170 City Champions participated in the event.

New engineering features that supported Chevrolet's "greater value" slogan were introduced in the 1930's. Knee-Action came out in the **1934** Chevrolet and made a smoother



In 1937 Chevrolet achieved the all-steel unisteel Body by Fisher.

ride possible. The "Blue-Flame" combustion chamber was pioneered in 1934 and the power of Chevrolet's valve-in-head Six was proved when a Chevrolet four-door sedan towed the Burlington Zephyr into its station in Chicago.

A new convenience feature of some 1934 sedans was a spacious, built-in trunk. New safety was engineered into Chevrolet bodies with the introduction of the all-steel Turret Tops. The 10-millionth Chevrolet was built on the company's 23rd anniversary, November 3, 1934.

Million-car years resumed in **1935** when Chevrolet built 1,066,197 units. A new assembly plant was opened in Baltimore, Maryland, and manufacturing plants were added in Saginaw, Michigan, and Muncie, Indiana. In **1936** a new commercial body plant, the world's largest, was dedicated in Indianapolis, replacing the facilities acquired in 1930.

Some 1934 Chevrolets featured a built-in trunk.

The 1932 Chevrolet had a built-in grille.

Chevrolet trucks demonstrated outstanding economy in a series of AAA tests in 1936. This 1½-ton truck is hauling a trailer with a 5-ton load up Pikes Peak. Another typical test was the coast-to-coast economy run from Los Angeles to New York carrying the same load.

In **1937** Chevrolet trunks became full size with spare tires enclosed. Other features included all-steel, Unisteel Body by Fisher with Safety *Plate* Glass all around the car. Expansion continued and a new manufacturing plant was opened in Tonawanda, New York.

The 15-millionth Chevrolet was built in **1939.**

Under Coyle's leadership, the Chevrolet Division averaged a million units a year for seven years. In the same period Chevrolet dealers sold 11,000,000 used cars. Signs of the impending war became more apparent in America in **1940** and Chevrolet's first U.S. government contract was made in April for the production of 75-mm. high explosive shells.

In **1941,** Chevrolet eliminated the outside running board from its cars. Production in 1941 reached 1,339,952–the last full production year until after World War II.

1931

1932

1933

1934

1935

1936

Chevrolet's Leading the Industry, 1931-1941

1937

1938

1939

1940

1941

1942

CHAPTER FOUR

Production for Victory—1942-1945

CHEVROLET geared for the impending war in the months before Pearl Harbor. Military trucks, parts for anti-aircraft guns, shells of varying sizes, and Pratt & Whitney engines were all part of Chevrolet's pre-Pearl Harbor production schedule in addition to building civilian cars and trucks.

On December 7, 1941, war came to the United States.

It was a snowy, cold afternoon in Flint when civilian production ended for Chevrolet. As the last of the **1942** models went off the assembly line, one of the workmen wrote: "Last Chevrolet off January 30, 1942."

A significant period in Chevrolet history was ended—volume production for victory was the new goal.

All Chevrolet plants were completely converted to war work, with the lone exception of the Saginaw Service Manufacturing plant. This facility was needed to supply the main-

Chevrolet began producing war materials in April, 1940.

tenance parts for the millions of Chevrolet cars and trucks already on the country's highways.

In providing this equipment for the country, wartime parts manufacturing teamed with a Chevrolet dealer service program to "Save the wheels that serve America."

Many Chevrolet plants achieved the Army-Navy "E" for excellence in production during the next four years.

A partial list of wartime products made by Chevrolet includes: 8,000,000 shells, 500,000 military cars and trucks, 60,000 Pratt & Whitney engines, 3,800 armored cars, 2,000 90-mm. guns, 200,000,000 pounds of aluminum forgings, 5,700,000 pounds of magnesium castings and 2,000,000,000 pounds of grey iron castings.

Many Chevrolet plants were awarded the Army-Navy "E" for excellence in production during World War II.

CHAPTER FIVE

More Cars for More People

THE END of the war signaled the return to civilian production and launched Chevrolet's greatest expansion program. Civilian truck production was resumed on August 20, **1945**, and car production began October 3, 1945.

New executive leadership was brought up to preside over this new period of growth. In June **1946**, M. E. Coyle was made an executive vice president of General Motors. Nicholas

In the fall of 1945, with the war over, Chevrolet began production of civilian passenger cars and trucks.

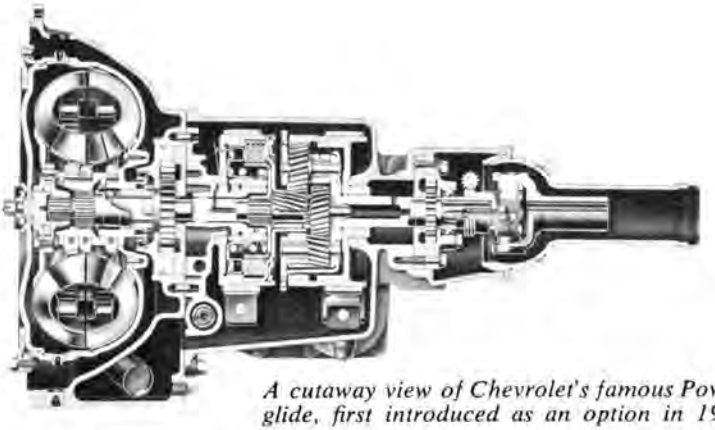
Dreystadt, general manager of Cadillac, moved to Chevrolet to succeed Coyle, and lead the company's postwar program.

After Dreystadt's untimely death in August 1948, W. F. Armstrong, a GM vice president, became general manager of the company. When Armstrong was given another GM assignment, T. H. Keating was advanced from Chevrolet general sales manager to general manager of Chevrolet and vice president of the General Motors Corporation.

The postwar years saw Chevrolet make giant strides in expansion and production and leadership in the low-price field. The Indianapolis commercial body plant was enlarged 50 percent and a new assembly plant began operations in Flint in **1947.** The new Los Angeles assembly plant started production in 1947 and a new Cleveland manufacturing plant opened in **1949.**

In **1950** Chevrolet brought out the first automatic transmission in its field, the famous Powerglide. The Bel Air hardtop was also an immediate hit with buyers that year.

Chevrolet introduced the Bel Air, a hardtop model, that became an immediate hit in 1950.



A cutaway view of Chevrolet's famous Powerglide, first introduced as an option in 1950.

Industry-wide records were shattered in 1950 when Chevrolet became the first company to make more than 2,000,000 units in U.S. plants during one year.

The Korean conflict brought defense contracts to the company, affecting many of its plants. As a result, car production was cut in order to meet the government contracts. Expansion continued for Chevrolet, with two million square feet of new plant buildings underway in **1952**.

More advances in the low-price field were introduced by Chevrolet when Bel Air luxury models bowed in **1953**. The increasing market for sports cars in America was met with the new Chevrolet Corvette, first introduced as a "dream car" at the 1953 Motorama. In June 1953 the Chevrolet Corvette was put into actual production. The Chevrolet Handyman, an all-steel station wagon, was introduced in 1953.

New plants in Flint, Michigan; Tonawanda, New York, and Livonia, Michigan, and additions in Cleveland, Indianapolis and Muncie were completed in **1954.**

Power brakes and automatic seat and window controls were introduced in the low-price field by Chevrolet in 1954.

Chevrolet reached a new all-time production record in **1955** when 1,830,028 passenger cars and 393,315 trucks were manufactured in U. S. plants.

The Chevrolet Corvette rolled off the assembly line in Flint, Michigan, six months after its introduction in January, 1953, at the General Motors Motorama.

The Corvette Nomad bowed as a dream car in the 1955 Motorama and later went into production utilizing the Chevrolet passenger car body.

A pre-production model '56 Chevrolet set a new stock car record for the Pikes Peak run in September 1955.

The Biscayne was another Chevrolet dream car giving an advance look at styling in years to come.

The 1956 Motorama was the debut of the Chevrolet Impala dream car.

New executive leadership came to Chevrolet in **1956** with the appointment of E. N. Cole as general manager of the division and vice president of General Motors. Cole, formerly chief engineer of Chevrolet, succeeded T. H. Keating, now retired, who was made vice president in charge of passenger car divisions of General Motors Corporation.

In **1957,** Chevrolet introduced Turboglide, the first triple-turbine automatic transmission in the industry.

Notable product features in **1958** included standard Full Coil suspension, and a new Safety-Girder frame which made possible a lower silhouette and greater head room.

Chevrolet surprised the American public and the automobile industry by introducing a completely restyled car for the second year in a row in **1959.**

The 41 millionth Chevrolet was built at the Baltimore, Maryland, assembly plant July 9, 1959.

1946

1947

1948

1949

1950

1951

Chevrolet . . . America's most popular car, 1946-1959

1952

1953

1954

1955

1956

1957

1958

1959

Chevrolet Central Office, Detroit

The General Motors Building, Detroit

A Few Chevrolet Firsts in the Low-Price Field

Valve-in-Head Engine • Duco Finish • Harmonic Balancer • Stabilized Front End Mounting • Octane Selector • Knee-Action • Turret Top • Unisteel Body • Safety *Plate* Glass All Around *(at no extra cost)* • Bonded Brake Linings • Automatic Transmission • Power Brakes • Panoramic Windshield • Air Conditioner • Ball-Race Steering • Hardtop Sport Sedan • Fuel Injection Engine • Electric Starter • Headlight Dimmer Foot Switch • Finger-Tip Seat Adjustment • No-Draft Ventipanes • Flanged Rear Axle Shafts • Complete Body Insulation • Box-Girder Frame • Diaphragm Spring Clutch • Curved Windshield • Hardtop Sport Coupe • Power Steering • Automatic Seat and Window Controls • High-Level Ventilation • 12-Volt Electric System • Anti-Dive Braking Control • Directional Signals *(as standard equipment)* • Turboglide Automatic Transmission • Positraction Rear Axle • Machined-in-Block Combustion Chamber • Level Air Suspension • Full Coil Suspension • 4-Link Rear Suspension • Safety-Girder Frame • Magic-Mirror Finish • Tyrex Cord Tires • Low Mounted Headlights • Foot Operated Parking Brake • Positive Shift Starter • Single Key Locking • 4-Speed Synchro-Mesh Transmission

Chevrolet Leaders

E. N. COLE
Chevrolet
General Manager
since 1956,
Vice President of G.M.

J. R. WILSON
General
Administrative
Manager
since 1957

E. H. KELLEY
General
Manufacturing
Manager
since 1952

K. E. STALEY
General
Sales Manager
since 1959

H. F. BARR
Chief Engineer
since 1956

F. R. FRASER
Divisional
Comptroller
since 1955

N. J. ELLIS
General Personnel
Manager
since 1957

FORMER GENERAL MANAGERS OF CHEVROLET

W. C. Durant 1911-1920
Karl W. Zimmershied 1920-1922
W. S. Knudsen 1922-1933
M. E. Coyle 1933-1946
Nicholas Dreystadt 1946-1948
W. F. Armstrong 1948-1949
T. H. Keating 1949-1956

FORMER CHIEF FINANCE OFFICERS

W. S. Ballenger *First Treasurer* 1911-1916
M. E. Coyle 1916-1933
E. W. Ivey 1933-1957

FORMER GENERAL SALES MANAGERS

W. K. Sills 1915-1921
Colin Campbell 1921-1924
R. H. Grant 1924-1928
H. J. Klingler 1929-1933
W. E. Holler 1933-1945
T. H. Keating 1945-1949
W. E. Fish 1949-1959

FORMER GENERAL MANUFACTURING MANAGERS

Fred Hohensee 1915-1921
C. F. Barth 1924-1931
C. E. Wetherald 1931-1945
Hugh Dean 1945-1949
W. J. Scott 1949-1952

FORMER CHIEF ENGINEERS

A. T. Sturt 1915-1921
O. E. Hunt 1921-1929
James M. Crawford 1929-1945
John G. Wood 1945-1949
E. H. Kelley 1949-1952
E. N. Cole 1952-1956

CHAPTER SIX

Dynamic Production Operations

Precision is the keynote of Chevrolet's dynamic production operations. A vast network of manufacturing and assembly plants spans the United States to meet the public demand for America's most popular cars and trucks.

Throughout this tremendous industrial organization—the core of the Chevrolet Motor Division—men and machines work together in perfect synchronization to maintain the highest possible standards of quality control in mass production.

Correct production scheduling is a vital factor contributing to a smooth running assembly line. All of the component parts of a car must be available at precisely the right time in order to keep the cars rolling off the line.

Dominant throughout this dynamic production is a constant maintenance of quality in materials and workmanship.

Thirty-four Chevrolet plants in towns and cities around the country work in manufacturing and assembling. The pictures on the opposite page give you an idea of the tremendous effect a plant can have on a community.

How an undeveloped area grew into a throbbing community when a Chevrolet plant entered the picture is graphically illustrated here. The top photograph of the Chevrolet assembly plant near Los Angeles, California, was made when the plant was dedicated in 1947. The picture below shows how the community looks today. Thousands of new homes have sprung up on acreage that was undeveloped 13 years ago.

Chevrolet Plants

THIRTY-FOUR manufacturing and assembly plants are operating for the Chevrolet Motor Division. Twenty-one of these facilities are manufacturing centers and thirteen are engaged in assembly operations. *Here is a breakdown of these plants:*

MANUFACTURING PLANTS

Bay City, Michigan
Buffalo, New York
Cleveland Passenger Transmission
Cleveland Pressed Metal
Detroit Forge
Detroit Gear and Axle
Flint Frame and Stamping
Flint Motor
Flint Pressed Metal
Flint Engine
Indianapolis Commercial Body
Livonia Spring and Bumper (Michigan)
Muncie, Indiana
Saginaw Grey Iron Foundry (Michigan)
Saginaw Service (Michigan)
Saginaw Transmission (Michigan)
Toledo Passenger Transmission
Tonawanda Forge (New York)
Tonawanda Motor (New York)
Tonawanda Foundry (New York)
Massena Aluminum Foundry (New York)

ASSEMBLY PLANTS

Atlanta, Georgia
Baltimore, Maryland
Bloomfield, New Jersey
Framingham, Massachusetts
Flint, Michigan
Janesville, Wisconsin
Kansas City, Missouri
Los Angeles, California
Norwood, Ohio
Oakland, California
St. Louis, Missouri
Tarrytown, New York
Willow Run, Michigan

NEW CHEVROLET PLANTS

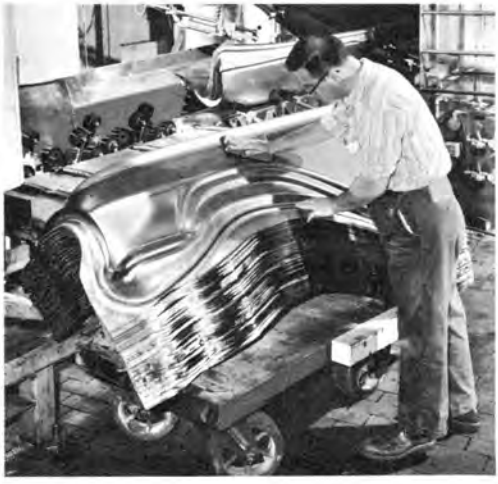
The Framingham (Mass.) Assembly Plant

The Massena (N.Y.) Aluminum Foundry

Chevrolet Corvair Assembly Plant, Willow Run, Michigan

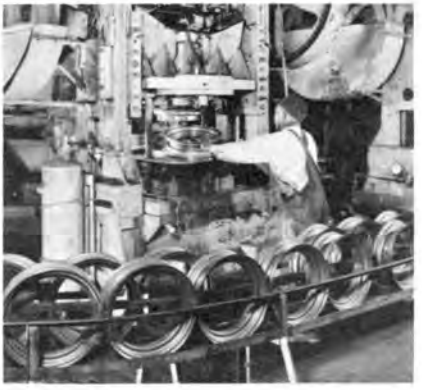
Building the 1960 Chevrolet in pictures

Pouring hot metal from cupola into ladle at foundry.



Workman inspects newly pressed front fenders.

Removing cylinder block casting from sand mold.



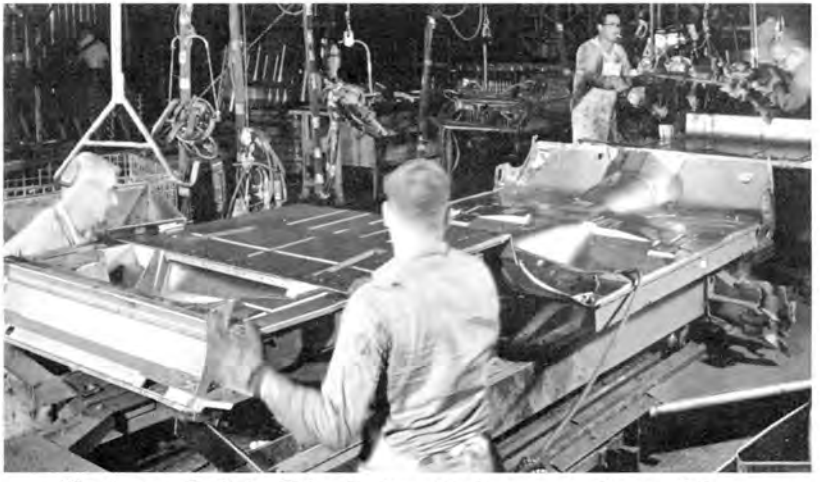
Forming, sizing and coining wheel rim.

Machines finish outer ends of rear axle housing for wheel bearings and brakes.

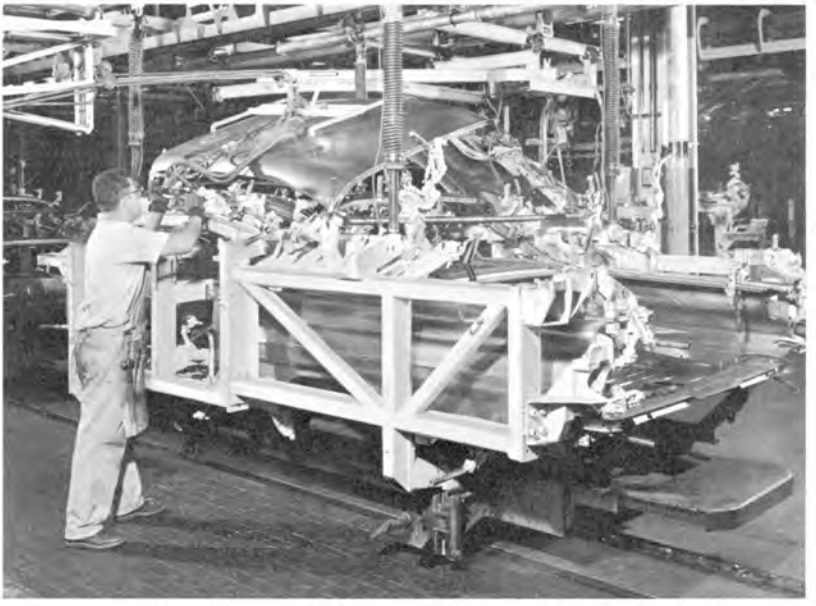
Machine-finishing the cylinder bores on V8 engine block.

Inspecting ring gear and pinions prior to assembly.

Engines are run under own power in final inspection test.



The famous Body by Fisher begins with the pan—or floor—of the car.



Now the roof meets the body and the car begins to take shape.

Grinding smooths the body before painting.

Chevrolet's new Magic-Mirror acrylic lacquer requires nine painting steps, produces a more lustrous, brilliant finish.

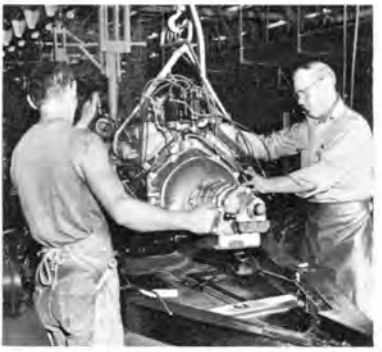
The windshield is placed in position.

Seats are placed in position as the bodies glide down the line.

When frame is placed on the line, the assembly operation begins. Workmen attach front end suspension units to frame.

Frame is automatically turned over from upside-down position. Rear axle will be added next.

Coil springs for rear end suspension are compressed as frame moves down the line.



Engine is swung into position on rubber mountings. Following installation of engine, the chassis is painted.

Chassis assembly is now complete and painted wheels are added. Air-wrench tightens all wheel nuts at one time.

Adjacent Fisher Body plant delivers bodies to Chevrolet assembly line. Workmen ready the body for "body drop" operation

Body meets chassis. Workmen secure body to chassis. Rear deck remains up for other assembly operations.

Front end takes shape as fenders, grille and radiator are dropped (as a unit) into position.

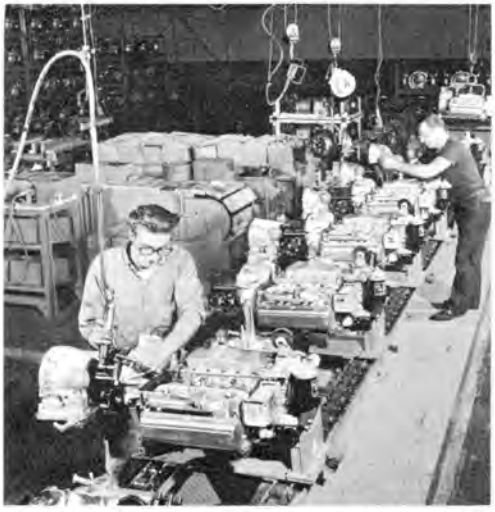
Batteries, windshield wipers have been added. Lights and turn indicator are tested as assembly nears completion.

Sixty minutes ago this car's frame started on the line. Gasoline, oil and water are added. Car moves from line under its own power.

Stickers represent many phases of inspection each car undergoes. Here inspector places final sticker on new Chevrolet.

After final inspection, the new 1960 Chevrolets are loaded on haulaways or boxcars to speed them to the Chevrolet dealers of America.

Building the 1960 Corvair in pictures



Assembly of the Corvair starts with the engine line where workmen attach transmission.

Fan, air shroud and dust shield are added to the Corvair power train.

Rear suspension is added to power train assembly.

Corvair bodies come from the adjacent Fisher Body plant in cradles which move slowly on monorail system.

Body hovers over front and rear suspension (and air-cooled engine). Hydraulic lifts bring components up to position where they are attached to body of car.

Wheels are added as workmen secure wheel-nuts all at one time with compressed air wrench.

Monorail-cradle dips car down and wheels touch the ground for the first time.

Cradle carrying Corvair is automatically released and car moves over workmen in well on moving flat-top conveyor.

Spare tire has been added in trunk; lights and turn signals tested.

Under its own power, the new Corvair runs under a pressure water spray and out of the factory.

That's the picture-assembly story of how the Corvairs you see on the highways today were built.

CHAPTER SEVEN

Why Chevrolet is Building Two Kinds of Cars

FOR THE first time in its 49-year history, Chevrolet introduces two totally different kinds of cars, the 1960 Chevrolet and the revolutionary new Corvair.

The Corvair answers a modern transportation need of our society. The majority of people in the United States still want an all-purpose car for the multitude of duties which the family car is called upon to perform. But there is an obvious need for a specialized type of car, designed to provide American standards of performance, comfort, safety and convenience but in a smaller size and at a lower cost.

The answer for these needs is supplied by Chevrolet with the perfect pair—the 1960 Chevrolet and the compact Corvair.

Impala Sport Sedan

Chevrolet in 1960

CHEVROLET'S 1960 conventional models feature smart and functional styling combined with a number of important engineering improvements.

The new styling gives the 1960 models a fresh, tailored look while further accentuating the fleet appearance achieved in 1959.

Mechanical changes feature a more economical V8 engine, a softer, quieter ride, and improved brakes.

Design modifications in the basic 283-cubic-inch V8 engine give up to 10 per cent more fuel economy on regular gasoline, and also provide greater engine torque at normal speeds. Chevrolet's other standard engine, the Hi-Thrift 6, remains one of the most economical engines in the industry. Six other engine choices are also available in the standard models.

Remarkable new rubber body mounts give every Chevrolet a "hush silent" ride as they muffle road noises and vibration.

Modifications have also been made in the brake wheel cylinder size to require less pedal effort for braking.

Impala 4-Door Sedan

Impala Sport Coupe

For 1960, Chevrolet is also featuring tires which have new tread material which gives a softer ride, decreases tire squeal and gives 10 to 20 per cent longer tread life.

Special attention is given to trunk space in the new models. Lower sills and wider opening allow more usable roominess in the luggage compartment.

Chevrolet engineers have also given the man in the middle a break with a redesigned body structure. The result is more leg room because of a lower, narrower transmission tunnel, reduced over 25 per cent in size.

The 1960 Corvette promises more driving fun than ever before with an improved suspension system and other refinements. New items for top performance units include a fuel injection engine with aluminum head and built-in cooling fans.

Impala Convertible

Bel Air Sport Sedan

Bel Air 4-Door Sedan

Bel Air Sport Coupe

Bel Air 2-Door Sedan

Biscayne 4-Door Sedan

Biscayne 2-Door Sedan

Biscayne Utility Sedan

Biscayne Fleetmaster 2-Door Sedan

Kingswood 4-Door 9-Passenger Station Wagon

Parkwood 4-Door 6-Passenger Station Wagon

Brookwood 4-Door 6-Passenger Station Wagon

Brookwood 2-Door 6-Passenger Station Wagon

Nomad 4-Door 6-Passenger Station Wagon

Chevrolet for '60 offers four models in the Impala Series—Sport Sedan, Sport Coupe, 4-Door Sedan and Convertible.

The Bel Air Series includes a new Sport Coupe, the Sport Sedan, 2-Door Sedan and a 4-Door Sedan.

The '60 Biscayne series has a 2- and 4-Door Sedan, Utility Sedan and 2- and 4-Door Biscayne Fleetmaster models.

The Station Wagon Series includes the 4-Door 6-Passenger Nomad, 4-Door 9-Passenger Kingswood, the 4-Door 6-Passenger Parkwood, the 4-Door 6-Passenger and 2-Door 6-Passenger Brookwood.

Color choices include 13 solids and 10 two-tone combinations.

Corvette

Corvair by Chevrolet

THE REVOLUTIONARY new Corvair by Chevrolet offers more advancements than have ever been offered before in the volume automobile market in the United States. These include:

(1) First modern rear-engine design.

(2) First horizontally opposed 6-cylinder engine made largely of aluminum.

(3) First forced-air air-cooled engine.

(4) First transaxle with independent suspension.

(5) Special tire-wheel development which gives excellent handling and stability.

Corvair 700 4-Door Sedan

The Corvair is the first U.S.-built car specifically designed the way a compact car should be. As a result, the Corvair offers many advantages not possible in other cars.

Corvair Advantages

(1) Excellent economy is attained—25 to 40 per cent more fuel savings than conventional 6-cylinder engines.

(2) Highly favorable weight distribution maintains the same overall stability and excellent riding, steering and braking characteristics at all loads.

(3) Excellent traction in mud, snow, ice and on hills because the engine is in the rear.

(4) Steering is feather-light and easy since there's less weight on the front wheels.

(5) Braking is light, positive and virtually fade-free with the added advantage of good steering control under heavy braking.

(6) Roomy unitized body has a virtually flat floor and ample space for six passengers.

Corvair 4-Door Sedan

(7) Corvair's horizontally opposed six-cylinder engine requires only a short warm-up period because of its smaller mass. Since the engine is air cooled it requires no water or coolants. Radiator and water pump have been eliminated.

The Corvair represents 1,500,000 engineering man-hours in a nine-year program of research, testing and development. The rear engine, rear-drive combination was found to offer the greatest advantages in this kind of car.

Four Corvair models are offered: the Corvair 700 4-Door Sedan, the 700 Club Coupe, the standard Corvair 4-Door Sedan and the Corvair Club Coupe. Transmission choices include the standard 3-Speed Synchro-Mesh and the Corvair Powerglide automatic, optional at extra cost. Both transmissions are specifically engineered for the Corvair.

Corvair 700 Club Coupe

1960 Chevrolet Trucks

Chevrolet El Camino

THE '60 Chevrolet trucks bring to the trucking industry the biggest improvements in decades. Chevrolet's new Torsion-Spring Ride has been called the "smoothest thing that ever came between a road and a load!"

This revolutionary new ride cushions the driver and the cargo from road shock, speeds up schedules, reduces driver fatigue, and tends to prolong life of chassis components. Tough torsion bar independent front springs work in combination with new rear suspensions tailored to the truck size.

Operating economy is another feature of Chevrolet's truck lineup. Economy-conscious 6 and V8 engines are designed for efficient performance and top dollar savings.

Exterior styling of the '60 Chevrolet trucks is characterized by a new bold look of power. Roomier rubber-mounted cabs are lower, stronger, quieter.

Series designations are Apache (light-duty), Viking (medium-duty) and Spartan (heavy-duty).

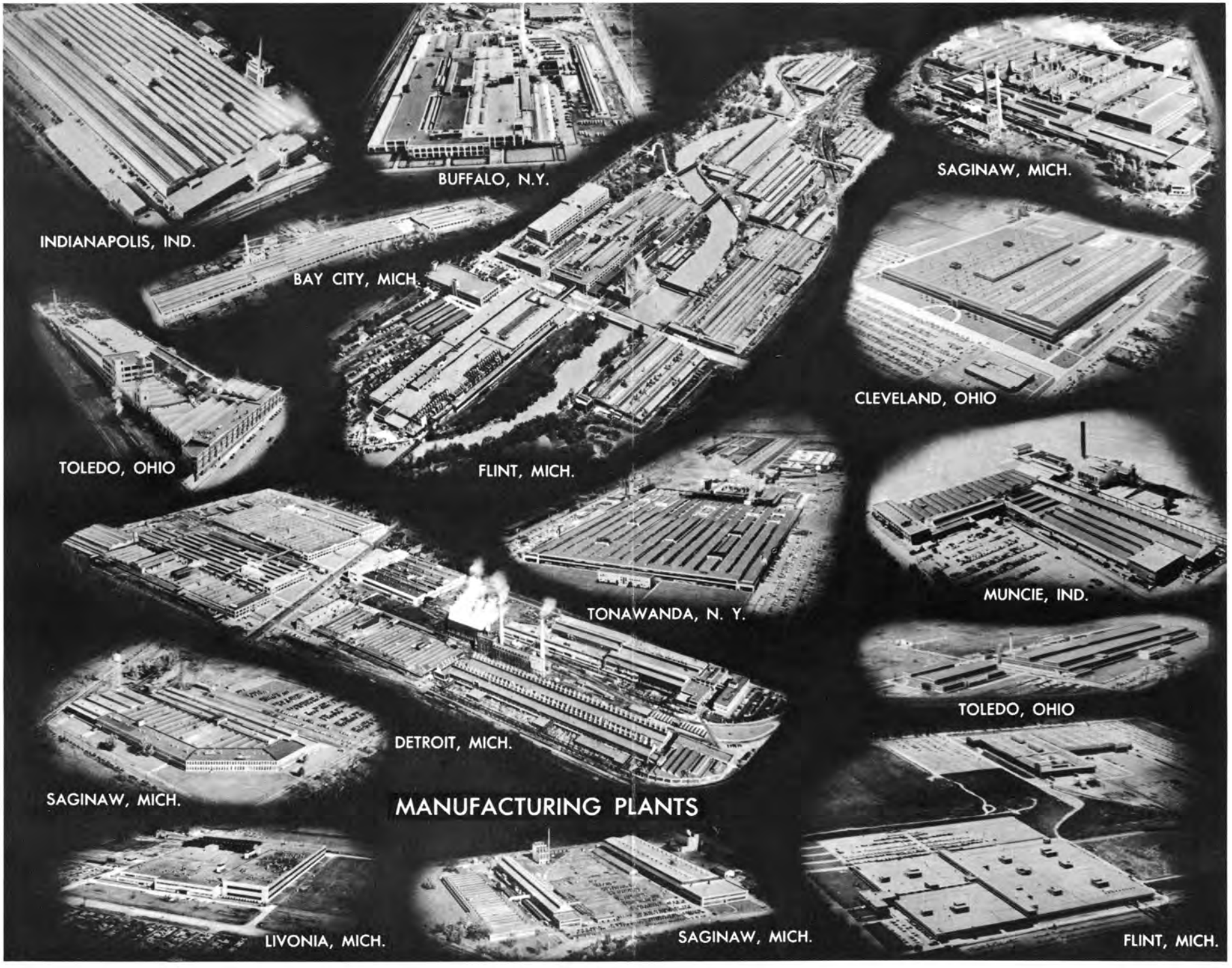
Chevrolet Tilt Cab Heavy-Duty Tractor

Chevrolet Medium-Duty Stake

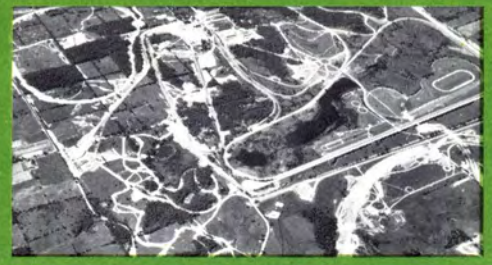
Chevrolet Light-Duty Panel

Chevrolet Forward-Control Step-Van

Chevrolet Heavy-Duty Tandem Dump


INDIANAPOLIS, IND.
BUFFALO, N.Y.
SAGINAW, MICH.
BAY CITY, MICH.
CLEVELAND, OHIO
TOLEDO, OHIO
FLINT, MICH.
MUNCIE, IND.
TONAWANDA, N. Y.
TOLEDO, OHIO
DETROIT, MICH.
SAGINAW, MICH.
MANUFACTURING PLANTS
LIVONIA, MICH.
SAGINAW, MICH.
FLINT, MICH.

The Chevrolet Engineering Center



The General Motors Proving Ground at Milford, Michigan

Chevrolet Engineering Builds for a Better Tomorrow . . .

Outstanding engineering and research facilities—the most complete in the industry—help maintain Chevrolet's quality production. The Chevrolet Engineering Center, the General Motors Technical Center, and the General Motors Proving Ground at Milford, Michigan, are devoted to the ever constant search for continued product superiority.

The General Motors Technical Center

Stylish new 1960 Chevrolet Fleetside pickup with revolutionary Torsion-Spring Ride.

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